

WHAT IS CLAIMED IS:

1. A process for the preparation of methyl pheophorbide a, comprising treating chlorin e6 trimethyl ester with a base in an aromatic solvent.
- 5 2. A process for the preparation of pyropheophorbide a, comprising:
 - (a) treating chlorin e6 trimethyl ester with a base in a high-boiling aromatic solvent to give methyl pheophorbide a; and
 - (b) heating the methyl pheophorbide a to effect decarboxylation and
 - 10 saponification.
3. A process for the preparation of ether analogs of pyropheophorbide a, comprising:
 - (a) treating chlorin e₆ trimethyl ester with a base in a high-boiling aromatic solvent to give methyl pheophorbide a;
 - 15 (b) heating of the methyl pheophorbide a to effect decarboxylation and saponification to give pyropheophorbide a; and
 - (c) treating the pyropheophorbide with an acid, followed by an alcohol under basic conditions to effect addition of the alcohol across a vinyl group.
- 20 4. The process of claim 3, wherein the alcohol is 1-hexanol (n-hexyl alcohol).
5. A process for the preparation of purpurin-18, comprising:
 - (a) treating chlorin e₆ trimethyl ester with a base in an aromatic solvent in the presence of air to give purpurin-18; and
 - 25 (b) re-esterifying the resulting purpurin-18.
6. A process for the preparation of ether analogs of purpurin-18, comprising:
 - (a) treating chlorin e₆ trimethyl ester with a base in an aromatic solvent in the presence of air to give purpurin-18;
 - 30 (b) re-esterifying the purpurin-18; and
 - (c) treating the re-esterified purpurin- 18 with an acid, followed by treating with an alcohol under basic conditions.

7. A process for the preparation of purpurinimides, comprising:
- (a) treating chlorin e₆ trimethyl ester with a base in an aromatic solvent in the presence of air to give purpurin-18;
- (b) re-esterifying the purpurin-18; and
- 5 (c) treating the re-esterified purpurin-18 with a primary amine.
8. A process for the preparation of ether analogs of purpurinimides, comprising:
- (a) treating chlorin e₆ trimethyl ester with a base in an aromatic solvent in the presence of air to give purpurin-18;
- 10 (b) re-esterifying the purpurin-18;
- (c) treating the re-esterified purpurin-18 with a primary amine to give a purpurinimide; and
- (d) treating the resulting purpurinimide with an acid, followed by an alcohol under basic conditions.
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